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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,612	01/22/2002	Peter Bissinger	0475-0199P	6493
2292	7590	11/07/2003	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			PENG, KUO LIANG	
			ART UNIT	PAPER NUMBER

1712

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,612

Applicant(s)

BISSINGER ET AL.

Examiner

Kuo-Liang Peng

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/6/03 Amendment.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17,25-40 and 42-52 is/are rejected.
- 7) ☒ Claim(s) 18-24,41 and 53 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The Applicants' amendment filed on August 6, 2003 was received. Claims 1-17 are deleted. Claims 18-54 are added. In the remarks of the amendment, Applicants indicated that there was a Claim 17 as a result of claims amended pursuant to Article 19 during the prosecution of the International Application of which this application is the National Stage. However, Examiner found to the contrary that there is no alleged Claim 17 in the original application. Therefore, the pending Claims 18-54 are re-numbered as Claims 17-53, respectively, pursuant to 37 CFR 1.126.

Specification

2. The disclosure is objected to because of the following informalities:

In the specification (page 17, lines 18 and 6-27), it is not clear as to what "E" refers to.

In the specification (page 17, lines 18 and 27), "I" is lack of antecedent.

In the specification (page 18, line 28), it is not clear as to what "n + m 4" refers to.

In the specification (page 20, line 27), "d = 0 or 1" causes confusion because "d" should be 1 (page 20, line 18).

Appropriate correction is required.

Claim Objections

3. Claims 17-41 and 50-53 are objected to because of the following informalities:

In Claim 17 (lines 10-11) and Claim 19 (lines 1-2), should "condensable" in "ionically condensable compound" and "free-radical condensable compound" be -- polymerizable --?

Claim 40 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

In Claim 50 (page 22, lines 10 and 21), should "COOH" be -- COO -- as indicated in the specification (page 19, line 31 and page 20, line 9)?

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 25-40 and 42-51 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In Claims 25, 27, 29 and 45, the scopes of E and x are not supported by the specification (page 17, lines 17-20 and 25-28).

In Claim 36 (line 10), "acyloxy" is not supported by the specification (page 21, lines 6-7).

Claims 42-49 are directed to a method for preparing a polymer comprising polymerizing monomers comprising condensable monomers that contain polymerizable groups. Note that the

method encompasses the embodiment wherein the condensable monomers (e.g., Formula I, etc.) have not been condensed yet at the time the polymerization is carried out. This embodiment is not supported by the specification wherein the condensable monomers containing polymerizable groups are condensed to afford polymerizable monomers that are subsequently subjected to polymerization (page 24, lines 22-28, page 27, lines 9-11 and Preparation examples 8+).

In Claim 34 (last line), " $n + m \leq 4$ " is not supported by the specification (page 18, line 28).

In Claim 43 (last line), " $n + m < 4$ " is not supported by the specification (page 18, line 28).

In Claim 50 (page 21, line 16), " R^{21} " being COOH is not supported by the specification (page 19, line 28).

6. Claims 50-51 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the use of a compound of formula (IX) wherein G must be a mono- to tetravalent organic radical (page 19, lines 10-11), does not reasonably provide enablement for the use of a compound of formula (IX) wherein G can be an organic radical having any number of valency (Claim 50, page 21, lines 7-8 and 18-19, page 22, lines 7-8 and 18-19 and page 23, lines 6-7). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

7. Claims 50-51 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the use of a compound of formula (IX) wherein Z is CHR with R equals to H, alkyl, aryl or alkylaryl when d is 1 and R²¹ is OH (page 19, line 31 to page 20, line 5), does not reasonably provide enablement for the use of a compound of formula (IX) wherein Z is C=O when d is 1 and R²¹ is OH (Claim 50, page 22, line 11). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 17 and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Yanagisawa (JP 06-228439).

Yanagisawa discloses a polymer prepared by a method of reacting a hydrolyzable and polymerizable silane having formula 2 ([0006] and [0037]).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (703) 306-5550. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson, can be reached on (703) 308-2340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

klp
October 31 2003


Kuo-Liang Peng
Art Unit 1712